

EFFECTS OF PARENTAL MENTAL HEALTH ON CHILDREN IN A WORLDWIDE
PANDEMIC

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Abstract

In March of 2020, the World Health Organization declared COVID-19 to be a worldwide pandemic. Shortly after, most of the United States called for businesses, schools, childcare facilities, restaurants, and entertainment venues to close their doors to "flatten the curve." What many thought would be a few short weeks turned into months of isolation. The impact of parental mental health on early childhood development has been researched for many years, but it has never been considered in the context of a worldwide pandemic. The paper is a literature review examining the effects of parental mental health on children with consideration to the added factor of the COVID-19 pandemic. The review sought to gain understanding and provide evidence of what the added implications might be to the delicate balance of parental mental health and early childhood development under such circumstances as a worldwide pandemic. Literature was collected from studies on parental mental health and early childhood development along with more recent research on effects of the COVID-19 pandemic over the past year. The review explored key areas of parental mental health, stress, anxiety, and depression that might pose greater risk due to the pandemic, on the negative impact these have on children. The conclusion was made that parental mental health is an important factor in the early development of children, and the impact of the COVID-19 pandemic on this important relationship needs further investigation. This relationship of parental mental health and early childhood development focused on the pandemic should be an area of concern and focus for all. Intervention, support, and education are vital to mitigate the negative impact of the COVID-19 pandemic and help support both parent and child.

Effects of Parental Mental Health on Children in a Worldwide Pandemic

In March of 2020, the world changed. What started as an obscure new virus that took over one country, quickly spread around the world within months. The COVID-19 virus transformed lives all over the globe. In the United States, what was expected by many to be a short time staying at home to lessen and lower the spread of the virus turned into months of lockdown for most. By the end of January 2021, according to Johns Hopkins University (n.d.), the United States had over 25 million confirmed COVID-19 cases and over 400,000 deaths. The numbers have and continue to cause serious disruption to the daily lives of families across the country. The pandemic has taken the United States from a 3.5% unemployment rate as of February 2020 to an almost double, 6.9% unemployment rate by the end of the 2020 year (U.S Department of Labor, 2021). The unique and unprecedented occurrence has caused questions to arise around the distinct needs and issues that appear during unforeseen circumstances such as a worldwide pandemic. Beyond the issues of unemployment, some parents and caregivers are now working remotely and have their children also at home. With stressors such as parents and guardians unable to work outside of the home, early childhood programs being closed due to the lack of employees or mandated quarantines, and concerns for the spread of the virus itself, families are now having to navigate major challenges that they have never previously anticipated. Parents face multiple stressors under normal circumstances, but with the addition of a pandemic and what that entails, parents might be struggling to handle it all in healthy ways, particularly in relation to their mental health. Prior to the COVID-19 pandemic, in a study reviewing parental mental health data from 2008 through 2014, it was estimated that over 20% of parents in the United States were dealing with mental illness in some form (Stambaugh et al., 2017). The data collected was from mothers and fathers, although, Stambaugh et al. (2017) did

find that mothers were at higher risk of mental health issues than fathers. The purpose of this literature review is to look at the parental mental health, with any studies specifically addressing maternal and paternal being indicated. Thus, questions arise as to how parental mental health affects children's early development. What role does parental mental health play in the developing child, and do circumstances such as a worldwide pandemic produce even greater disparities in the connections between parental mental health and child development?

Though the research on the effects of the worldwide pandemic is new and in the beginning stages, early studies are identifying that a major concern of the impact of the COVID-19 pandemic is that of mental health (Liu et al., 2020; Tang et al., 2021). Between isolation, quarantines, deaths of family and close loved ones, struggles to maintain jobs, helping children with virtual learning, and providing financially, it is no surprise that the issue of mental health in general is becoming a targeted subject of interest. Some key concerns in mental health research related to the pandemic are depression and anxiety (Berthelot et al., 2020; Liu et al., 2020). Prior to COVID-19, there has been concern and research conducted on serious mental health issues and the impact of those on people during other major crises such as natural disasters (Fussell & Lowe, 2014). Studies have also found connections between mental health decline in situations such as outbreaks and isolation (Hawryluck et al., 2004; Jeong et al., 2016; Tang et al., 2021).

After reviewing studies addressing decline in mental health functioning during and connected to serious traumatic circumstances such as virus outbreaks, political upheavals, natural disasters, and other factors, connections can be drawn specifically to parental mental health and the children they care for. Multiple bodies of research have provided evidence showing that as risk factors (such as maltreatment, maternal mental health issues, family dynamics, lower social-economic status, and other factors) multiply for children, negative outcomes in development also

multiply (Edwards et al., 2003; Sameroff et al., 1987). While we can draw some insight and information about parental mental health and children's development in connection within certain situations, the COVID-19 pandemic is creating a unique new context to the relationship between parental mental health and child development. The COVID-19 pandemic has brought with it a peculiar culmination of circumstances that are still being realized. This unprecedented situation is producing a unique environment of family dynamics that has never been researched previously. This paper, through gathering and examining information from previous studies, attempts to gain understanding of the relationship between parental mental health and early childhood development within the context of a pandemic.

Method

The paper included results from a systematic review and merging of pertinent literature on the relation between parental mental health and children's early development with focus on the dynamic of the relationship during difficult and stressful circumstances, such as the COVID-19 pandemic. A synthesis of the research literature to identify connections among parental mental health, children's early development and a worldwide pandemic is included. The literature collected was from peer reviewed material and was collected from searches conducted in electronic databases such as, but not limited to ProQuest, CINAHL Complete, PsycINFO, ScienceDirect, ERIC and JSTOR through the University of Michigan Library System. The searches were conducted over a ten-month period from May 2020 to February 2021. Further studies and literature were retrieved through review of reference lists in searched papers that met the key-word criteria. Three of the pieces of literature were prior to 1996, all others were between 1997 and 2020. Keywords used in the search included combinations of the following: parental mental health, maternal, paternal, early child development, pandemic, psychopathology,

COVID-19, depression, isolation, early learning, quarantine, sickness, anxiety, and other closely related terms. With the above criteria, 98 research articles were reviewed. Of the 98 articles reviewed, 68 were found to meet the criteria for use within the specific study. Articles were removed that did not connect directly to parental mental health issues of stress, anxiety, and depression as it relates to the development of children or to these issues linked to traumatic experiences such as pandemics and natural disasters.

Literature Review

In a 2001 report, the World Health Organization stated that over 25% of the world population has some type of mental health issue. In a study reviewing parental mental health data from 2008 through 2014, it was estimated that over 20% of parents in the United States were dealing with mental illness in some form (Stambaugh et al., 2017). More recently, in the U.S. household survey conducted throughout the COVID-19 pandemic, information published in January of 2021 showed that over 22 million people answered yes that they needed therapy or mental health care but had not received it. Of that group, over 8.5 million stated they were living in homes with children, ages birth to 18 years (U.S. Census Bureau, 2021). This is a large amount of the U. S. population caring for children and not receiving the necessary care for mental health and mental illness in a time of uncertain and challenging circumstances. Initial research has found that there may be a distinct difference between COVID-19 related anxiety and normal occurring anxiety (Kubb & Foran, 2020). Prime et al. (2020) found that risk factors, such as low social economic status, are compounded in circumstances such as the COVID-19 pandemic. These distinct differences and compounded risks should be closely considered in strategies to support and facilitate overall health and well-being in the parent-child relationship as it connects to a child's early development.

The effects of parental mental health on early childhood development are intrinsically intertwined within the parent-child relationship. The parent plays an important role in the life of the developing child. It is important to attempt to understand the impact of parental mental health on children in their early developmental years. Parental mental health can affect development of the child socially, emotionally, and physically (Pierce et al., 2019; Yue et al., 2018). Children who have parents with mental health issues tend to have difficulties in their social interactions and struggle with issues internalizing and externalizing (Breux et al., 2013). To understand more clearly, internalizing behavior are those behaviors that are more self-focused such as withdrawn, anxiety, depressive symptoms, and externalizing behaviors are those that are outward focused such as aggression and hyperactivity (Liu, 2004). A systematic review study found multiple ways in which children's physical health is found to be compromised with increase in injuries, issues with gastrointestinal problems, and asthma when parents are dealing with mental health issues (Pierce et al., 2019). Important to note that children in the care of parents with mental health issues are reported to be almost twice as likely to experience mental health problems themselves, opposed to children in the care of parents without mental health issues (Plass-Christl et al., 2017). Also, children of parents with mental health problems are almost five times more inclined to need and seek out mental health care for themselves than children of parents that do not experience mental health problems (Plass-Christl et al., 2017). With this information, it would be helpful to understand the links between parental mental health and children. This paper breaks down and focuses on three areas of mental health, stress, anxiety, and depression, that have been closely scrutinized during the COVID-19 pandemic. The literature is reviewed to consider how the area of mental health has been impacted during the COVID-19 pandemic, how it impacts parents, and how that effects child and their development.

Stress

Stress is a natural occurrence in life, but stress unmanaged and multiplied in unhealthy circumstances can be detrimental to individuals and others closely connected to them (Slavich, 2016). Compounding stress within a worldwide pandemic might put individuals and those closely connected to them at even greater risk of unhealthy outcomes. The American Psychological Association (APA) conducts a national survey each year on stress. The 2020 *Stress in America Report* revealed that almost 80% of respondents, 3,409 adults 18 years and older, said the COVID-19 pandemic was causing a drastic increase in their stress levels. This increase in stress and its effects on children should be investigated. First, should be a foundational understanding of parental stress and then how that parental stress impacts children. After reviewing these separately, the information will be summarized to understand the connections and possible implications.

Parental Stress

In the *Stress in America Report* over 60% of parents, defined as adults with at least one child in the home for whom they are the legal parent or guardian, reported that their stress was greatly connected to their children's education and well-being (APA, 2020). Stress among parents is not new to the world or the realm of research. Studies have been conducted over many years about parental stress; the links, the implications, the levels, and its effects on the family unit and children. With the addition of families attempting to navigate a worldwide pandemic, an increase in stress levels for parents would be expected.

To understand the effects of parental stress on children within the pandemic, it is important to first understand how the pandemic is being linked to increased stress levels in

parents. In a recent study conducted in 2020 consisting of over 26 countries and over 53,000 people, evidence linked higher levels of stress for women over men during the COVID-19 pandemic (Kowal et al., 2020). Certain personality traits also are connected to increased stress levels in parents during circumstances such as pandemics (Mazza et al., 2020). Kowal et al. (2020) also found that people with children were experiencing and reporting much higher levels of stress during the COVID-19 quarantine than their counterparts without children. Also notable, was the stress levels increased as the number of children living in the home increased (Kowal et al., 2020). Parenting stress did appear to see even great increase in parents who had initially reported mental health concerns prior to the COVID-19 pandemic (Miller et. al, 2020). Miller et al. (2020) indicated that parents who were married or had partners appeared to have lower parental stress levels compared to single parents who appeared to have higher parental stress during the pandemic. Miller et al. (2020) found that foster parents that were unmarried and/or single were reporting higher levels of stress and higher mental health struggles during the early stages of the COVID-19 pandemic. All these circumstances, along with factors such as job insecurities, fears of illness, and overwhelming burdens of childcare, surrounding the pandemic are contributing to increases in parental stress levels, and with the increase in parental stress it is possible there might be an increase in developmental concerns for children.

Effects of Parental Stress on Children

Parents play an important role in children and their development and parental stress might have an impact on that development. Research indicates stress does have a direct impact on how a parent interacts, works with, and raises their children (McLloyd, 1990). Past studies have provided evidence that parents with high stress levels show less affection and attentiveness and often utilize negative parenting approaches such as authoritarian or controlling behavior

style (McLoyd, 1990). The authoritarian and controlling parenting styles have been linked to several negative childhood outcomes. The following outcomes discussed are important to consider when seeking to understand the possible implications of increased parental stress on children in the COVID-19 pandemic. In relation to the child's physical development, childhood obesity has been linked to more authoritarian parenting styles (Kakinami et al., 2015; Melis Yavuz, & Selcuk, 2018). Authoritarian parenting has also been linked to children's lower self-esteem (Pinquart & Gerke, 2019). Liu et al. (2018) confirmed that the lack of self-regulation skills in children can be connected to controlling and authoritarian parenting. The combination of higher parental stress during the COVID-19 pandemic and the relation to negative parenting styles, such as authoritarian, might produce some negative outcomes in early childhood and years later in the developmental trajectory.

While higher stress levels in parents are linked to more negative parenting styles, the higher stress levels also account for issues with psychological flexibility in parenting which in turn affects children (Fonseca et al., 2020). Psychological flexibility refers to the ability to adjust and adapt in different situations and circumstances. As stress levels increase, parents tend to have lower psychological flexibility. They have a more difficult time adjusting and adapting to the circumstances around them. With circumstances changing weekly, and sometimes daily, during this pandemic, it is an important point to consider when discussing the impact on parental stress and how it affects children.

Parent behaviors connected to parental stress do have relative significance to children's behavior, and conversely parental behaviors related to lower stress levels tend to yield children with few behavior problems (Sanner & Neece, 2017). These behavior problems that arise in children that are affected by parental stress could be related to even more issues for children in

their educational journey. Behavior problems do appear to have a negative impact on children's academic achievement in their early years and as they go farther along in their education (Kremer et al., 2016). With the understanding that children's behavior problems are linked to parental stress and in turn can impact a child's academic achievements, it is important to recognize that the increase in parenting stress due to the COVID-19 pandemic could potentially create an increase in child behavior problems and possibly an even greater impact on children's academic achievement.

There are other ways that parental stress might impact early childhood development. Nilsson et al. (2019) provided evidence that adverse stress in infancy and toddlers might be connected to developmental issues and mental health concerns as early as 18 months. In the sample of 18-month-old children that were exposed to extended stress, these children experienced delays in cognition, behavior, and were more prone to issues with attention (Nilsson et al., 2019). Although studies have found that resilience can help children overcome certain delays over time, there are still links between delays in young children and the effects long-term (Rutter, 1980). Vazsonyi and Javakhishvili (2019) linked negative early infant socialization to long-term issues with aggression and self-control. These studies indicate that children exposed to adversity, such as parental stress, during the early childhood years could have long-term issues with delays and development.

Nilsson et al. (2019) linked adverse stress in infancy and toddlers to children that were more prone to develop anxiety issues. Metz et al. (2016) also found that higher levels of parental stress was an indicator of anxiety developing in children. A study conducted in 2010 by Visu-Petra et al. linked children, ages 3 to 7 years, with high anxiety to issues with "verbal processing efficiency." This means that young children that develop high anxiety had trouble with response

times and processing when speaking and answering questions (Vsu-Petra et al., 2010). What this indicates is children who experience adverse stress in their early years do tend to be more likely to develop anxiety. In addition, anxiety in young children impacts their verbal processing skills.

Another notable connection is evidence indicates higher levels of parental stress are associated with children's sleeping problems (Martin et al., 2019). This is important due to the impact sleep has on the developing child. Lu et al. (2015) found that the quality of sleep for a child was linked to the child's emotions and peer relationships. Children that had poor sleep quality tend to experience more negative emotions such as anger, fear, sadness, and frustration (Lu et al., 2015). The increase in negative emotions in turn indicated these children were prone to struggles with peer acceptance (Lu et al., 2015). Sleep problems in children are also found to be linked to physical concerns. Pattinson et al. (2018) found children who had shortened hours of sleep were more likely to have higher body mass index than children who had longer hours of sleep.

Summarization of Parental Stress and Children

The COVID-19 pandemic has appeared to produce higher levels of stress for individuals, particularly parents (Kowal et al., 2020; Miller et al., 2020). This increase in stress is important to consider, as parental stress has been found to have an impact on parents themselves and on the children that are in their care. These findings inform that there are multiple ways in which parental stress can impact children negatively. Parental stress is linked to physical concerns for young children, such as obesity and higher body mass index (Kakinami et al., 2015; Pattinson et al., 2018). This stress also impacts mental and emotional health and development of children (Lu et al., 2015; Metz et al., 2016; Nilsson et al., 2019). With the information that parental stress is

at higher levels during the pandemic and the understanding of the role parental stress has on young children, it is important to consider what support and resources families need during this time. To help the development of young children, there should be focused concentration and resources utilized to help parents struggling to manage additional stress brought on by the COVID-19 pandemic.

Anxiety

The issue of increased anxiety symptoms during the COVID-19 pandemic has been one of major concern. It is necessary to point out that most of the following information and review of literature is in relation to general anxiety symptoms and not anxiety disorders. These general symptoms of anxiety can include but are not limited to excessive worry, feelings of being overwhelmed, a loss of sense of control in certain situations and circumstances. When these symptoms become persistent, ongoing, and unable to manage, a diagnosis of an anxiety disorder might be necessary to gain treatment. It will be specifically indicated if a study being mentioned is referring to anxiety disorders. Otherwise, the term anxiety will refer to general anxiety symptoms.

The United States Census Bureau has conducted weekly household surveys on levels of anxiety for individuals since the onset of the COVID-19 pandemic. In one of the most recent weekly surveys conducted in January 2021, over 42 million people indicated that almost every day they struggled with feelings of anxiety and nervousness. Of that population, over 17 million of those are in homes with children, from 0 to 17 years old, and that 17 million is an increase from the early surveys conducted during the initial onset of the pandemic (U.S. Census Bureau, 2021). The survey also found that over 30 million individuals indicated that they could not

control their anxiety and worry, and of that group over 12 million were living with children ages 0 to 17 years old (U.S. Census Bureau, 2021). This collection of information does not specify that these individuals are parents or guardians, and the survey was conducted on individuals over the age of 18 years old. Even so, the information is important to gaining insight into the mental health of families and adults living with and caring for young children during this time. With preliminary findings such as these over the past year, the need to understand the connections between parental anxiety and early childhood development is even more important than in previous times. Kubb and Foran (2020) concluded that anxiety specifically related to the COVID-19 pandemic is distinctly different than other general anxiety forms and should be considered as such. Kubb and Foran (2020) suggest that anxiety related to COVID-19 may be perceived differently due to public attention such as social media and world news outlets that focus on the broader picture of public health around the world. They also suggested that the anxiety around COVID-19 could be from individual's fears about their entire family, close loved ones, and not just the individual themselves (Kubb & Foran, 2020). It was indicated that the COVID-19 related anxiety was related more so to the perception of trauma and threat (Kubb & Foran, 2020). Just like other forms of anxiety, the study found that COVID-19 related anxiety can also be affected by differing family variables and risk factors, such as partner relationships, employment status, and general family functioning (Kubb & Foran, 2020). With this information, it is necessary to investigate anxiety and how it might influence early childhood development.

Parental Anxiety

Emerging research has found that increased burden in caring for children, both paternal and maternal, is directly associated with anxiety and parent perceived child stress (Russell et al.,

2020). Russell et al. (2020) did find that increase in the burden on a caregiver is linked to increased anxiety symptoms. That is an important point considering the increased burden on parents to care for their children during this pandemic. This study indicated, as well, that partnered parents experienced higher anxiety symptoms compared to single parents (Russell et al., 2020). Financial difficulty also appeared to be a factor connected to parental anxiety (Russell et al., 2020). This is another important point to consider due to the increased unemployment rates during this pandemic. With childcare facilities closed or functioning differently than before, parents taking on the burden of educating their children, and many families living and working at home full time, the COVID-19 pandemic has forced parents to carry a heavier load in relation to their children and their care. These factors related to increase of anxiety for parents during the COVID-19 pandemic, are important to consider when looking at the effects of parental anxiety on children.

Effects of Parental Anxiety on Children

Parental anxiety does appear to be an indicator of children developing anxiety disorders themselves (Beidel & Turner, 1997; Pahl et al., 2012). Also, correlations have been found between parental anxiety disorders and less cooperative parenting which consists of undermining co-parenting, unsupportive partnership, and disrespect of parenting decisions and authority which in turn was connected to young children experiencing an increase in fear temperament (Metz et al., 2016). This fear that was referred to in the study was children struggling with stress and anxieties over factors such as new people, new situations, and new interactions (Metz et al., 2016). It is not clear where these connections come from, either genetic or environmental, or both. If environment does influence this association of parent and child anxiety along with child

fear temperament, there may be potential for an increase in childhood anxiety issues in the near future associated with the COVID-19 pandemic.

Another area important in understanding the impact of parental anxiety on children is in the prenatal and infant stages. Parental anxiety has been shown to play a key role in infant health (Vente et al., 2020). Vente et al. (2020) found parental anxiety to be a distinct risk factor closely related to early hyperarousal in infants (Vente et al., 2020). Some symptoms and indicators of hyperarousal in children are irritability, sleeping problems, easily startled, and concentration difficulty. In a study of 12-month-old infants and their parents, Aktar et al. (2012) linked parental anxiety to infant avoidance to new people or things. Infants and young toddlers appeared to be particularly sensitive to parental anxiety. Parental anxiety also has an impact even before birth. Maternal prenatal anxiety has been linked to children's attention and emotional problems later in the developmental years (Van Batenburg-Eddes et al., 2012). Berthelot et al. (2020) concluded that the COVID-19 pandemic may cause an increase in anxiety for mother's and in turn might have a negative impact on unborn children. The importance of prenatal and postpartum mental care for parents is important in the development of infants and toddlers. With the additional anxiety associated with the COVID-19 pandemic, prenatal and postpartum mental health for mothers, fathers, and caregivers should be closely monitored for prevention and intervention.

Summarization of Parental Anxiety and Children

Initial surveys are showing increases in anxiety along with indications that individuals are struggling with anxiety symptoms and the ability to control them (U.S. Census Bureau, 2021). There is also research indicating that anxiety related to COVID-19 should be considered as unique from other anxiety and may need to be treated as such (Kubb & Foran, 2020). These studies along with Russell et al. (2020) finding that increases in caregiving burdens, financial

strain, and married and partner struggles within a home are linked to increases in parental anxiety, inform as to the importance of gaining understanding of the impact that parental anxiety can have on children.

This review has shared multiple ways in which parental anxiety affects children. The effect of parental anxiety is found to impact a child even before they are born (Berthelot et al., 2020; Van Batenburg-Eddes et al., 2012). Parental anxiety is linked to children's mental and emotional development (Beidel & Turner, 1997; Metz et al., 2016; Pahl et al., 2012). Children appear to struggle with issues of fear, issues with their ability to concentrate, and their own anxiety when in the care of a parent dealing with anxiety (Metz et al., 2016; Vente et al., 2020). This information combined with the knowledge of how many individuals are struggling to handle the added anxiety of the COVID-19 pandemic, inform and suggest that parents may need help and support to gain healthy ways to manage their anxiety.

Depressive Symptoms

Depression and depressive moods have also been an issue of concern over the course of the COVID-19 pandemic. Depression and depressive mood do have similar symptoms, such as tiredness, hopelessness, loss of interest, sadness, and general discontent, but to be clear, depression and a depressive mood are two different mental health issues (“Achieve TMS”, 2021). A depressive mood will typically fade away for an individual within a few days or weeks (“Achieve TMS”, 2021). Depression is a diagnosed mental condition that can linger with a person for much longer and even be a life-long struggle that requires treatment (“Achieve TMS”, 2021). This review will be referring to the symptoms associated with depression and depressive moods unless specifically stated otherwise. There have been increases in symptoms of depression and depressive moods from the onset of the pandemic to recent days according to The

U.S. Census Bureau (2021). With the added strain of circumstances such as unemployment and childcare concerns, parents are dealing with major issues that could be a part of the reason some of these serious depressive moods and diagnosed depression might be heightened.

Parental Depressive Symptoms

Depressive symptoms in parents have been linked to several concerns within the parent-child relationship. Parents facing heightened depressive symptoms tend to have parenting behaviors that are unsupportive and unstable (McLoyd, 1990). Parental depression has been found to have an indirect connection to parental neglect (Mustillo et al., 2011). Another implication of parental mental health concerns, specifically depression, is the connection with increased hostility toward and experienced by children (Dougherty et al., 2013).

Evidence of the increase of parenting burden, itself, during the COVID-19 pandemic has shown increase in depressive symptoms in mothers, specifically (Kimura et al., 2021). The more changes connected to the COVID-19 pandemic, the higher level of depressive symptoms was reported in mothers (Kimura et al., 2021). One study also found that pregnant women during the COVID-19 pandemic, as opposed to pregnant women prior to COVID-19, are showing higher levels of depressive symptoms (Berthelot et al., 2020). The study found an increase in depressive symptoms, also with an overlapping of post-traumatic stress disorder symptoms, for pregnant women during the COVID-19 pandemic (Berthelot et al., 2020). Berthelot et al. (2020) concluded that during the pandemic, pregnant women, of any socioeconomic background, may have increased depressive symptoms that might negatively impact the developing fetus. Depression and depressive moods in parents are issues that might be connected to delays in early development in children (Dougherty et al., 2013; Mustillo et al., 2011). The increase in

depressive symptoms over the past year should be of concern to the field of early childhood development and other fields working to support families.

Effects of Parental Depressive Symptoms on Children

Depressive symptoms in parents are found to be associated with child-parent conflict (Russell et al., 2020). As studies show a disconnect and increased conflict in the parent-child relationship due to parent depression and depressive symptoms, these issues, in turn, are linked to children developing their own issues and difficulty in their peer relationships (Liu et al., 2020). Ren et al. (2019) found that children of U.S. born parents who experienced increased parent-child conflict tend to have issues in their social-emotional development and in self-regulation. Important to note in this study is that children of Mexican born parents who were immigrants to the U.S. did not have the same issues with parent-child conflict that was linked to self-regulation and early development (Ren et al., 2019). That information might indicate that some concerns and issues surrounding mental health of parents could be affected by ethnic and cultural backgrounds. Even still, parental depressive symptoms, in general, do appear to have an impact on the parent-child relationship and in turn on early childhood development.

Research provides evidence that parental depressive symptoms, both maternal and paternal, play a role in children's early development (Fredriksen et al., 2018). The impacts of parental depression on children starts even before birth and in early infancy (Lebel, et al., 2016). Maternal depression is not only harmful to the mother who experiences it but has been found to have a key impact on her child's emotional, social, and mental development (Goodman, 2019). Evidence has been provided that parental mental health, specifically the mother's prenatal and postpartum, does play a significant role in brain development for infants (Lebel et al., 2016).

With studies showing the impact of parental depressive symptoms on children even before they are born and in their early infancy, close attention should be given to families, working to determine the mental health of the parents during pregnancy and soon after to provide important interventions and support.

The effects of parental depressive symptoms make their impact even beyond infancy into early childhood. One other connection that has been found between parental depression and early childhood development is that of language development. One study found delays in children's social-emotional development and language development connected to caregiver depression (Yue et al., 2018). Fredriksen et al. (2018) found direct links between father's depressive symptoms and child language outcomes. They found direct links in father's depressive symptoms and children's lower scores on language scales, such as the Bayley-III (Fredriksen et al., 2018). Fredriksen et al. (2018) indicated that this connection could be due to typical gender roles within a family, where fathers may withdraw from interaction when dealing with depressive symptoms and typically mothers are not able to do that. Even so, language development is an important part of early childhood development and might affect children on a longitudinal level (Herman et al., 2016). This connection could be due to less positive parental interactions in the parent-child relationship when parents are dealing with depressive symptoms. If parents are struggling with depressive symptoms and not receiving help and support, they may find it difficult to articulate and cultivate a language rich environment for their child.

Parental depressive symptoms also affect other developmental areas for young children. Preschoolers of parents with depression are significantly more likely to experience problems with behavior and emotional regulation (Mustillo et al., 2011). Likewise, mothers' depressive symptoms were also found to be closely linked to children's internalizing and externalizing

problems, as well as dysregulation issues (Fredriksen et al., 2018). Early development of dysregulation skills for children of parents with depressive symptoms may be heightened within the context of the COVID-19 pandemic. Research prior to the COVID-19 pandemic showed direct connections between parental depressive symptoms and such problems in early childhood development (Fredriksen et al., 2018; Lebel et al., 2016; Yue et al., 2018). The links between parental depressive symptoms and early childhood development should be monitored even more closely within the context of a worldwide pandemic. If depressive symptoms have increased for parents during the COVID-19 pandemic, there could potentially be an increase seen in children delayed or stunted development of self-regulation, as well.

Summarization of Parental Depressive Symptoms and Children

With increases in depressive symptoms over the past year due to the COVID-19 pandemic (U.S. Census Bureau, 2021), the concern for parent depressive symptoms should be closely considered with a holistic approach to families and their well-being. Research prior to the COVID-19 pandemic showed direct connections between parental depressive symptoms and problems in early childhood development (Fredriksen et al., 2018; Lebel et al., 2016; Yue et al., 2018). The links between parental depressive symptoms and early childhood development should be monitored even more closely within the context of a worldwide pandemic. If depressive symptoms have increased for parents during the COVID-19 pandemic, there could potentially be an increase seen in early developmental delays, as well. This is an area that should be researched more to determine the long-term implications that the pandemic might have on parent and child.

Discussion

The purpose of this literature review was to gain understanding of parental mental health effects on children with focus on how this dynamic might be impacted within situations such as a worldwide pandemic. There are distinct connections between mental health decline and situations such as virus outbreaks and mandated isolations (Hawryluck et al., 2004; Jeong et al., 2016; Tang et al., 2021). Recent literature has indicated an increase in mental health issues during the COVID-19 pandemic (Berthelot et al., 2020; Kimura et al., 2021; U.S. Census Bureau, 2021). This information is important to acknowledge when attempting to help communities and families during such times. The U.S. Census Bureau (2021) has tracked the stress, anxiety, and depressive symptoms of individuals through monthly surveys conducted throughout the pandemic. This idea is further supported in a Canadian study, where a large portion of participants indicated a decrease in overall mental health during this pandemic (Gadermann et al., 2021). Also, important to consider is the realization that mental health, specifically stress and anxiety, during this pandemic has been found to be distinctly different than in typical non-crisis circumstances (Kubb & Foran, 2020). Combined, these findings indicate that it would be beneficial to understand key aspects of mental health during the COVID-19 pandemic, specifically that of parental mental health and how it affects children. The current information regarding mental health during the pandemic can be combined with previous studies to gain understanding into how the pandemic might impact parental mental health and the effects on children. This literature review study sought to find these associations.

Implications

The burden of parental mental health issues on children is an area of key importance. Children living with parents that have mental health issues were more likely to develop their own mental health problems such as anxiety and low self-esteem (Oskouie et al., 2011). Some mental

health issues in parents could lead to interruptions of early education for children due to a parent's inability to help with and encourage learning in the home (Oskouie et al., 2011). Also, important is the parent-child relationship with a parent struggling with mental health issues tends to indicate role reversal where the child will feel the need to care for the parent, and the parent tends to show less supportive and nurturing behaviors with their children (Tabak et al., 2016). With parents and children being forced to be at home due to quarantines, working remotely, lack of childcare, and more, the effect of parent-child role reversal and parent's inability to help children with their educational needs could be exasperated for all families but possibly even more so for families struggling with parental mental health issues. This must be considered when policy makers and those handing down mandates are closing educational programs and other facilities where families receive support and the help they need to maintain a healthy family.

Other important reasons for understanding the links between parental mental health and its effects on children during a worldwide pandemic are concerns for comorbidity of mental health issues. Studies have found that being alone and instances of isolation can be linked to higher levels of comorbidity in mental health disorders, both in situations brought on out of disasters, virus outbreaks, or through being alone for extended periods of time (Jacob et al., 2019; Vermeulen, 1977). In a recently published study of over 3,000 Canadian families, Gadermann et al. (2021) reported 44.3% of parents were experiencing a decrease in their mental health state. In one part of the questionnaire, 8.3% of participating Canadian parents reported an increase in suicidal thoughts during the pandemic (Gadermann et al., 2021). This information should seek further study to find out if these increases in mental health issues and comorbidity of mental health could be linked to increase concerns and delays in children's development. The effects of the COVID-19 pandemic on parents and children are being revealed as time continues,

but these mental health strains on families who might have already been dealing with serious mental illness need careful consideration and interventions sooner rather than later for the parent and the child.

Implications for Clinical Practice

The parent-child relationship is a deeply interconnected dynamic. A study conducted during the onset of COVID-19 indicated that during this pandemic the ability of the parent to regulate their emotional reactions was directly connected to children's reactions to stressors (Shorer & Leibovich, 2020). It is important that the interconnection of parent and child is a healthy interaction for the benefit of both parent and child. Mental health of mother and father play a significant role in a child's mental health and their development (Vänskä et al., 2017). Just as negative parental behavior, such as negative talk, detachment, and control, is associated with low levels of children's executive function, so is positive parental behavior, such as sensitivity, support, and physical closeness, associated with higher levels of executive function in children (Valcan et al., 2017). This indicates that as a decline in parental mental health status tends to have a negative effect on early childhood development, so does increased parental mental health have a positive effect on early childhood development.

During the added strain of the COVID-19 pandemic, families might need additional support that would help them navigate their own mental health issues and lessen the impact on the child. The focus for the child and the parent should be approached holistically, working with the entire family rather than separate individuals, to help alleviate any negative outcomes for the entire family unit. To understand a child and their overall mental, physical, and emotional health and development, it would benefit knowing and understanding the parent and their overall mental, physical, and emotional health. Both parent and child would benefit more from this type

of holistic approach. This approach of understanding would be beneficial for early childhood educators, health care providers, and any professionals working together as a team to support a healthy family unit.

There are ways in which families struggling with parental mental health issues can find positive outcomes to benefit the child and the parent. Wiegand-Grefe et al. (2019) suggest that intervention and treatment focusing on family functioning with families that have parental mental illness could potentially improve children's mental well-being in the long run. Studies have found that the need for holistic approaches that encompass treatment and planning for the entire family, not just the person with the mental health issue, is needed and beneficial (Oskouie et al., 2001; Reupert et al., 2008). The finding of another study indicated that family dynamics such as partner support and good home environment were the key to positive outcomes within a home where a parent is experiencing depression (Giallo et al., 2017). Regarding the COVID-19 pandemic, one buffer of the impact of the pandemic on children might be that of families with two parents living in the home (Miller et al., 2020). All this information does give hope to some families with parental mental illness who are striving to work through this pandemic with their children. If families can find the support and resources they need during this time, there could be fewer negative outcomes for children living in homes with parental mental health issues.

Implications for Future Research

In terms of future research, it would be useful to extend the current findings between the mental health implications of COVID-19 on parents and how it impacts children. Research literature specifically related to the COVID-19 pandemic and parental mental health is limited at this time. Research about the COVID-19 pandemic's impact on parental mental health and how it will affect children's early development is also limited. The COVID-19 pandemic and the

impacts of it are just starting to be investigated and the implications of this pandemic will be further explored as time proceeds.

Parental mental health and the development of young children during the COVID-19 pandemic is a unique circumstance. Families are being exposed to situations that they are unfamiliar with and uncertain of, such as working from home, assisting children with overseeing their education, and managing concerns over a virus that is impacting everyone on a global level. The implications and ramifications of the effects of the COVID-19 pandemic on family dynamics are multi-dimensional with many layers and components interconnected within them. In addition to these unique and unprecedented circumstances, there are further family dynamics that also are important aspects of parental mental health and early childhood development. Every family is potentially experiencing their own unique circumstances due to their social economic status, race, religion, culture, and family relationships within the home and their community. These additional factors need to be considered when researching the impact of the COVID-19 pandemic on parental mental health and early childhood development. It would be beneficial to inquire about the effects according to race, ethnicity, culture, religion, and more in-depth maternal and paternal differences. With the world only being a year into the COVID-19 pandemic, there will likely be long-term implications of its effect on the family dynamic as a whole and for each person individually. Each individual unit of the family is experiencing the pandemic in their own unique and complex way. Longitudinal studies on these impacts would be instrumental for future generations.

Further research also needs to be conducted with greater detail into other areas that might impact parental mental health and early childhood development outcomes. In addition to parental mental health, consideration should be made to determine the impact on families of abuse and

neglect, socio-economic struggles, and other family risk factors. The families facing more risk factors, in addition to struggling with mental health issues, will most likely need additional help to navigate their way through the added difficulties and challenges they are encountering due to the COVID-19 pandemic, and that would be an important topic for future research.

Conclusion

This literature review sought to find associations among parental mental health and early childhood development within the context of a worldwide pandemic. There were distinct connections found that indicate increases in parental mental health issues due to the COVID-19 pandemic may have direct connections to children's early development. With these findings, it would be imperative for professionals working with families during the pandemic to be vigilant in extending support, resources, and intervention when families are in need. As stated by Bryce (2020), the true ramifications and outcomes of early child development in the COVID-19 pandemic have not yet been revealed and will most likely significantly impact our practices and future. The specific implications of parental mental health on children and their development during this time will most likely produce long-lasting outcomes that will need to be addressed through intervention, professional practice, and family education. Medical professionals and educators will play an important role in helping families find support for their mental health needs and will need to determine what can be done to help the children living with parents struggling with mental health issues.

Families of all types may need interventions and support finding the resources to get the help they need, and the children they are caring for may be too young to understand and help their parent seek out the help they need. The responsibility must be taken on by the individuals that are able to positively offer support and resources (e.g., physicians, nurses, caregivers, and

teachers). These individuals must seek to be vigilant in watching for families that need these interventions. Without the prompting and encouragement from such professionals, parents may never seek appropriate help for their mental health and the children they care for may suffer the consequences in their development, mentally, physically, and socially.

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